Power System Operation Corporation Limited
Western regional Load Despatch Centre

FLASH REPORT

MESSAGE NO- LD/05/ DATE:-07/05/2014 Time : 16:00 hrs

Incident:

1. Date and Time07/05/2014 and 10:06 HRS

2. ANTECEDENT Conditions

I. Frequency of NEW Grid

Event	Frequency (Hz)	Time(hh:mm)
Pre incident	50.101	10:05
Post Incident	50.077	10:07

II. Demand Met

Sl.No	Area/Region	Demand Met(MW) at 10:05	Demand Met(MW) at 10:07
1	WR	39783	39649
2	Gujarat	11637	11625
3	Maharashtra	17910	17968
4	Madhya Pradesh	5656	5644
5	Chhattisgarh	2718	2687
6	Goa	345	345
7	DD	267	267
8	DNH	647	645
9	ESIL	558	558

3. Elements affected:

As intimated by MSETCLSLDC, Kalwa. Numerous 220kV lines in Pune ring main and peripheral area tripped at about 10:06 hrs of date 07.05.2014. This includes the Urban Pune and outskirts of Pune which extend upto the area under Jejuri and Baramati. The area went dark from 10:06hrs to 10:20 (approx) hrs. The Urban Pune was restored at 10:20 hrs and other area including Jejuri was restored at about 10:34 hrs.

4. The sequence of tripping and Restoration are as follows.

Sr No.	Name of the Element	Outage Time(hrs)	Restoration time(hrs)	Reasons
1	220kV Urse-Chinchwad	10:06	10:21	Tripped on Over –Load with load reaching 800A.
2	220kV Chinchwad-Chakan	10:06	10:17	Tripped on over load
3	220kV Flagship-Chinchwad	10:06	10:34	Tripped on over load
4	220kV Pirangut-Hinjewadi-II-Chinchwad	10:06	10:18	Tripped on over load
5	220kV Parvati Chinchwad	10:06	11:40	Tripped on over load
6	220 kV Jejuri-Parvati	10:08	10:19	Tripped on over load
7	220kV Jejuri- Lonand	10:08	10:34	Tripped on over load
8	220kv Jejuri-Baramati	10:08	10:17	Tripped on over load
9	220kV Kandalgaon-Lonand	10:08	10:25	Tripped on over load
10	220kV Bhosari-II-Telco-Chinchwad	10:07	10:46	Tripped on over load

5. The above sequence of timing mention at 10:06 hrs are indicative in nature, tacitly the difference in tripping timing is in milliseconds.

6. The loss of Load: The loss of Load reported is in the range of 1000 MW to 1200MW. Affected areas are Pune, Jejuri and Baramati from 10:06 to 10:34 hrs. As a result frequency rose by 0.2Hz from 50.05Hz to 50.225Hz. Subsequently, Maharashtra drawl from the Grid decreased from 6577 MW at 10:00hr to 5442 MW at 10:10 Hrs.

7. Effect on line loading :

a) The line flow on Wardha-Parli reduces from 721 MW to 632MW.
b) The line flow on Raichur->Solapur reduces from 313MW to 254 MW.
c) The line flow on Parli-Pune reduces from 424MW to 349 MW.
d) The line flow on Aurangabad-Pune reduces from 313MW to 220 MW.
e) The line flow on Bhadrawat-Parli reduces from 422MW to 376 MW.
f) The flows on both Pune ICT change from 183Mw to 83MW.
g) The Voltage at Pune Bus increase from 388kV to 410kV
h) The Voltage at Kalwa Bus increase from 396kV to 407kV

8. Generaton loss: There is no loss of generation reported by MSETCL.

9. Further details are awaited from MSETCL. The exact causes of tripping are still unknown and are expected from MSETCL at the earliest.

10. Action taken : Timely action by MSETCL, lead to early restoration of load in the affected Area.

11. PMU Plot: Phasor Voltage at Kalwa (Va, Vb, Vc) and Frequency from Kalwa, Bhadrawati and Korba is enclosed.

(Shift Charge Manager)

Distribution:

S/I : NLDC, SLDC- GETCO, MPPTCL, MSETYCL, CSPTCL, GOA, DD, DNH,

Control room: NTPC, CGPL AGM/GM-WRLDC, MS-WRPC